



Paving the Way for STEM in History Museums

TEXAS
HISTORICAL
COMMISSION
REAL PLACES TELLING REAL STORIES

BEYOND
THE
ROAD

BULLOCK
TEXAS
STATE HISTORY
MUSEUM

Constructing a Narrative: Writing about STEM for a Specific Audience

Discussion Guidelines

- Use “I” statements and speak only from your own experience
- Assume good intent and be aware of your impact
- Maintain confidentiality—what is said here stays here, what is learned here leaves here
- Share the air—leave room for everyone to speak and don’t interrupt
- Seek first to understand—ask questions to clarify, not to debate
- Participation may be verbal, but it is also deep listening
- Challenge yourself and engage with discomfort
- Be willing to make a mistake and be understanding when others make them
- Seek to learn from differences—everyone’s unique backgrounds give us different life experiences

Group Activity

We'll begin with a group review and discussion of the "Label Writing Approach" handout as well as a sample STEM content label.

After that, we'll divide into randomly selected breakout rooms to facilitate small group discussion for today's activity.

If you have questions when one of us is not in your breakout room, select "Ask for Help" in your control bar and one of us will quickly join you. We'll communicate logistical details like how much time you have left via announcements that will appear at the top of your breakout room screen.

Integrated circuit prototype

1958

Photograph, Jack Kilby

(all objects)
Courtesy Texas Instruments, Dallas

The integrated circuit was invented in 1958 by Jack Kilby at Texas Instruments. This is one of several prototypes. His chip integrated all of the circuit elements into a single piece of semiconductor material, greatly reducing the size and cost of computers while increasing their reliability. Kilby's invention is recognized as the beginning of the information age, made the first desktop computer possible, and earned him the Nobel Prize in Physics in 2000.

El circuito integrado fue inventado en 1958 por Jack Kilby de la compañía de Instrumentos de Texas. Este es uno de varios prototipos. Su chip integró todos los elementos del circuito en una sola pieza de material semiconductor, reduciendo enormemente el tamaño y el costo de las computadoras, a la vez en que incrementaba su confiabilidad. La invención de Kilby es reconocida como el principio de la era de la información, hizo posible la primera computadora de escritorio y le valió el Premio Nobel de Física en 2000.

Datapoint 2200 #2

1972

Courtesy San Antonio Museum of Science and Technology
(www.SAMSAT.org)

The Datapoint 2200 weighed 40 pounds and, novel for the time, had its own screen, keyboard, memory, and processor. As demonstrated by the open cassette deck on the top right of the computer, it was originally meant to function as a data processing unit. This standalone computer terminal performed a number of functions, including printing payroll checks, tracking inventory, and recording shipments. This unit had a memory capacity of 16 kilobytes, roughly enough memory to hold a four-page text document.

El Datapoint 2200 pesaba 40 libras y la novedad de aquel tiempo fue que tenía su propia pantalla, teclado, memoria, y procesador. Como se demostró por la cubierta abierta del casete en la parte de arriba en el lado derecho de la computadora, esta fue originalmente hecha para funcionar como una unidad procesadora de información. Esta terminal de computadora independiente realizaba un número de funciones, incluyendo la impresión de cheques de nóminas, rastreo de inventario, y cargamentos de grabación. Esta unidad tenía una memoria con una capacidad de 16 kilobytes, aproximadamente suficiente memoria para guardar un documento de texto de cuatro páginas.

Group Activity

Thinking about the work we did on Tuesday related to the resource [“Road-related Property Types”](#) imagine that you are creating a single artifact label to explain a set of road construction core samples: one illustrating concrete road construction, one asphalt.

In your groups, do the following:

- Determine your readability level
- Determine your main idea
- Write a 65-word label at your chosen readability level and including your main idea

We'll come back together at the end and have each group read their label and discuss how the process went.

Let's do it!

